REMARKS

Claims 1-21 are pending in this application, of which claims 1, 6, 12, 17 and 21 being independent. Claims 6-11 and 17-21 have been withdrawn.

Claims 1 and 12 have been amended to clarify aspects of the present application. Support for the amendments to claims 1 and 12 is found, for example, on page 8, lines 1-26 of the present application. Care has been taken to avoid introducing new matter. Applicant respectfully submits that all pending claims are patentable over the cited prior art.

Claim Rejection – 35 U.S.C. § 103

Claims 1-3 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 03/086971 ("Starchenko") and further in view of U.S. Patent Publication Number 2005/0110024 ("Swain"). Claim 4 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Starchenko in view of Swain, and further in view of WO 2004/046062 ("Akaishi"). Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2001-021521 ("Meidensha"). Claims 13 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Meidensha, and further in view of Swain. Claims 15 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Meidensha and Swain, and further in view of Akaishi. Applicant respectfully traverses these rejections for at least the following reasons.

Regarding independent claims 1 and 12, Applicant respectfully submits that none of the cited references discloses or suggests that the high-hardness conductive diamond polycrystalline body is obtained by directly converting a graphite-type carbon material including boron into diamond and concurrently sintering at high temperature and high pressure, so that the boron is included in a lattice site of the particle of the diamond. Starchenko fails to disclose the use of

boron in the source material, and thus fails to disclose the above identified features of claims 1 and 12. Swain appears to disclose adding B_2H_6 as a source gas in a CVD process, but fails to disclose the use of the graphite-type carbon material and the use of high temperature and high pressure converting process and the sintering process. Similarly, since Meidensha uses a CVD process, Meidensha fails to disclose the use of the graphite-type carbon material and the use of high temperature and high pressure converting process and the sintering process. Further, Akaishi fails to disclose the use of boron, and thus fails to disclose the graphite-type carbon material including boron as the source material. As such, it is clear that none of the cited references disclose or suggest the above identified features of claims 1 and 12.

Applicant further submits that Meidensha fails to disclose at least 1,000 ppm and at most 100,000 ppm of boron in the diamond body, as recited by claim 12. Applicant notes that the boron concentration of 10^4 ppm in Meidensha is the concentration of B with respect to C (B/C) in the mixture of B_2O_3 and acetone and methanol, i.e. the source material (see, paragraph [0025] of Meidensha), but is <u>not</u> the concentration of boron in the diamond particle. Paragraph [0025] of Meidensha states (machine translation from the JPO website):

> [0025]As a film deposition system, using the microwave CVD-film-formation device made from ASTeX, the conductive diamond electrode in this embodiment was produced with the microwave plasma assistant CVD method, as shown below. First, after carrying out texturing treatment (it grinds with 0.5 micrometer of diamond powder) of the silicon substrate surface, using a silicon substrate (Si (100)) as said conductive substrate, said silicon substrate was fixed to the electrode holder of a film deposition system. What dissolved the quantity which serves **as 10^4ppm by boron / carbon (B/C) ratio in boron oxide (B_2O_3) in the mixture** was used, using the mixture (fluid; mixture ratio, a volume ratio 9:1) of acetone and methanol as sauce for membrane formation (emphasis added).

Applicant respectfully requests that the Examiner explain, with technical reasoning, why this paragraph discloses the ***boron concentration in the diamond particle***, and how this value would be converted to the boron concentration in the diamond particle. It is respectfully submitted that

mere coincidence of the numerical value means nothing. Applicant further notes that it is clear that none of the remaining cited references cures the deficiency of Meidensha. As such, it is clear that none of the cited references discloses or suggests the boron concentration as recited by claim 12.

Based on the foregoing, it is clear that none of the cited references discloses or suggests the above identified features of claims 1 and 12, and it would not have been obvious to add these features to any combination of the cited references. Accordingly, claims 1 and 12 are patentable over the cited references. Thus, Applicant respectfully requests that the Examiner withdraw the rejections of claims 1-5 and 12-16 under 35 U.S.C. § 103(a).

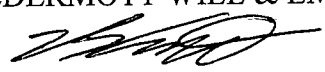
CONCLUSION

Having fully responded to all matters raised in the Office Action, Applicant submits that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Takashi Saito
Limited Recognition No. L0123

Please recognize our Customer No. 20277 as our correspondence address.

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 TS:blb
Facsimile: 202.756.8087
Date: September 9, 2009